Gaps in Information Literacy Knowledge and Skills Among First-Year Postsecondary Students in Minnesota

Key Findings and Recommendations from Interviews with Faculty

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Executive summary

Minnesota students are entering college without the essential information literacy skills needed to navigate their education, careers, and civic life. As artificial intelligence (AI) reshapes how information is produced and misinformation spreads rapidly across digital platforms, faculty report growing concern about students' ability to find, evaluate, synthesize, and responsibly share information. These gaps are not marginal; they are reshaping teaching, constraining learning, and compounding inequities across disciplines and institutions.

This study draws on faculty perspectives from across Minnesota's two- and four-year colleges and universities to examine where first-year students struggle most and what changes are needed to better prepare students for postsecondary success.

KEY FINDINGS

Faculty reported the largest and most consequential skill gaps in three interconnected areas:

- **Identifying and accessing diverse sources**
  Students rely heavily on narrow, familiar tools (e.g., Google or a single database), struggle to use search strategies effectively, and have limited understanding of source types or how information systems are structured. They struggle to seek out multiple perspectives or intentionally consider who produces information and why.
- **Evaluating sources for credibility and accuracy**
  Students tend to rely on surface indicators of credibility (appearance, familiarity, ranking) rather than contextual judgment. Verification and corroboration practices are weak, and students struggle to distinguish fact from opinion or identify misinformation — challenges amplified by increasing use of generative AI tools.
- **Synthesizing and sharing findings ethically**
  Rather than integrating ideas to develop new understanding, students often compile sources without meaning making. Conclusions are frequently underdeveloped, and ethical responsibilities related to audience, framing, and interpretation receive limited attention. Reflection on the research process is typically procedural rather than analytical, and research is rarely approached as iterative inquiry.
- **These gaps negatively affect instruction and student outcomes at the college level.**
  Faculty reported spending substantial instructional time remediating foundational skills, which meant that class time was diverted away from in-depth content, applied learning, and higher-order thinking. Courses are increasingly structured around scaffolding and process management rather than exploration and depth. For students, information literacy gaps compound over time, contributing to shallow engagement, reduced confidence, overreliance on AI, and difficulty navigating uncertainty. Faculty emphasized that these challenges likely extend beyond coursework, affecting students' readiness for professional work, civic participation, and lifelong learning.

- **Evidence supports an investment in licensed library professionals in K-12 schools.** In the 2024-25 school year, 250,375 Minnesota students across 521 schools had no access to a licensed school library media specialist and only 19% of school libraries met the full statutory definition of a school library. This is despite more than 50 years of research illustrating the correlation between having licensed professionals in schools and increased student proficiency in subjects like reading and math (Burress et al., 2023; Otero Martinez, 2024; Wine et al., 2023).

RECOMMENDATIONS

Faculty shared several clear and actionable recommendations for the K-12 education system and policymakers:

FOR K–12 EDUCATORS AND ADMINISTRATORS

- ✓ **Make information literacy explicit and foundational.** Integrate it intentionally across disciplines and support it with trained librarians and media specialists.
- ✓ **Prioritize research as a process.** Emphasize inquiry, evaluation, synthesis, revision, and reflection over speed and task completion.
- ✓ **Sustain reading and synthesis instruction beyond early grades.** Support students in engaging with complex texts and connecting ideas across sources.
- ✓ **Teach ethical, transparent use of AI and digital tools.** Focus on how technologies work, their limitations, and responsible use.
- ✓ **Encourage collaboration and help-seeking.** Normalize working with librarians and asking questions as essential academic skills.

FOR POLICYMAKERS

- ✓ **Elevate and align information literacy and research in standards and policy.** Treat them as essential, not supplemental skills.
- ✓ **Invest in staffing and expertise.** Ensure sustained access to licensed librarians and instructional support personnel.
- ✓ **Maintain attention to advanced reading skills.** Support discipline-specific reading beyond early literacy.
- ✓ **Adopt thoughtful AI policies.** Promote responsible use rather than reactive restrictions.
- ✓ **Examine accountability pressures.** Ensure testing and performance incentives do not crowd out inquiry, synthesis, and deep learning.

METHODS

This study was conducted in fall 2025 in partnership with Minitex. Wilder Research interviewed 21 faculty who teach first-year students at two- and four-year postsecondary institutions across Minnesota. Faculty also completed a short pre-interview survey aligned with the 2025 Information & Technology Educators of Minnesota (ITEM) standards. Interview questions were informed by survey responses and focused on four learning domains: information literacy, digital citizenship, technology and innovation, and literacy engagement. Findings were analyzed thematically to identify consistent patterns across disciplines and institutions.

CONTENTS

Introduction

The ability to critically evaluate sources, use technology effectively, and engage responsibly in digital spaces is fundamental to both workforce success and a functioning democracy.

In fall 2025, Minnesota librarians partnered with Wilder Research to assess existing gaps in students' information literacy skills as they begin college. Wilder conducted in-depth interviews with 21 faculty from varied colleges and universities across the state who teach first-year students. Faculty were asked about the gaps between the knowledge and skills first-year students are expected to have and the knowledge and skills they had on entry to college. The questions focused on four key domains based on updated standards for 12th graders from ITEM (Information & Technology Educators of Minnesota): information literacy and research, digital citizenship, technology and innovation, and literacy engagement.

The findings reveal large gaps in student preparedness for college that, if not addressed, could have negative implications for Minnesota's future workforce. This report summarizes those findings and presents recommendations for policymakers and K-12 educators to ensure Minnesota students graduate with the skills that our information age demands.

Key findings

Faculty consistently described notable gaps in first-years students' information literacy and research skills, particularly around evaluating sources, engaging critically with information, and applying research skills independently. Across fields of study, interview participants expressed concern that students arrive underprepared for the expectations of college-level inquiry. While skill gaps were also identified in the areas of digital citizenship, technology and innovation, and literacy engagement, information literacy and research gaps were the most abundant and concerning among faculty. Therefore, the following sections summarize the key themes related to information literacy and research skills.

Responses from faculty suggest that students' struggles are less about motivation and more about foundational exposure and practice of information literacy skills. Students often lack experience with structured searching, evaluating authority, navigating information systems, and intentionally engaging with diverse sources — skills that faculty view as essential for success in postsecondary learning.

Among information literacy standards developed by ITEM, the areas where students fell shortest, and that faculty identified as most essential for postsecondary success, were:

- Identifying and accessing diverse sources
- Evaluating source for credibility and accuracy
- Synthesizing and sharing findings ethically

In a brief, pre-interview survey, more than 75% of faculty identified students as having "moderate" or "significant" gaps in the above skill areas. For more detailed responses from a short survey with faculty, see the methods section. The following sections detail faculty opinions about student skills in these three areas from interviews.

IDENTIFYING AND ACCESSING DIVERSE SOURCES

STUDENTS STRUGGLE TO IDENTIFY APPROPRIATE AND DIVERSE SOURCES

Faculty consistently described students struggling to **identify a range of relevant sources** when beginning research. Students tend to rely on a narrow set of familiar tools, most often Google or a single database, rather than considering **who authoritative voices might be** for a given topic or **what types of sources could best address a research question**. Students were described as gravitating toward sources they already know, even when those sources are poorly suited to the assignment. Faculty noted that students often stop searching once they find *something* rather than continuing to explore additional

perspectives or formats. This contributes to shallow research and limits exposure to diverse viewpoints. Several faculty noted that students rarely pause to think about *who* produces information or *why* certain sources might be more appropriate than others. While they have more of a tendency to ask these questions when it comes to news on social media, they are less likely to do so when identifying sources for a research project.

> **Students tend to assume that if it shows up on Google, it must be legitimate. There's very little questioning of where the information actually comes from. -Interview participant**

LIMITED USE OF SEARCH STRATEGIES AND NAVIGATING SOURCE STRUCTURE

Faculty widely observed gaps in students' ability to **use intentional search strategies**. Students often enter full questions or vague phrases into search tools rather than identifying keywords, related terms, or synonyms. There was frequent mention of students' limited use of filters, advanced search features, or sorting tools in databases. Faculty describe students as largely unfamiliar with how database structures work, which makes it difficult for them to refine or expand searches effectively. And for students who had previous exposure to literature search engines, they were challenged to transfer those skills to a different platform.

Students often struggle to scan abstracts, headings, tables of contents or website navigation to assess relevance. Instead, they may attempt to read entire sources without understanding how information is organized, which can be overwhelming and inefficient.

> **…students just read the title of the reports or journal articles and they don't know how to utilize the abstract and do not have full grasp of what the article is about. -Interview participant**

LIMITED EXPOSURE TO MULTIPLE PERSPECTIVES

Faculty indicated that students frequently fail to **identify sources representing different perspectives on an issue**. While assignments may explicitly ask for contrasting viewpoints, students often lack the skills to intentionally seek out pro/con positions or recognize perspectives within sources. This was described as a persistent challenge, particularly in evaluating arguments rather than simply locating information.

NARROW UNDERSTANDING OF SOURCE TYPES

Most of the faculty interviewed said that students have a **limited conception of what counts as a credible or useful source**. While databases and websites were commonly mentioned, students show less awareness of distinctions among source types (e.g., primary vs. secondary sources, scholarly vs. popular). Some faculty also raised concerns about students' growing reliance on AI tools without sufficient understanding of their limitations or appropriate use.

> **They'll use blogs or random websites and treat them the same as scholarly articles. There's not a strong understanding of what makes a source credible. -Interview participant**

EVALUATING SOURCES FOR CREDIBILITY AND ACCURACY

NARROW UNDERSTANDING OF WHAT COUNTS AS AN APPROPRIATE SOURCE

Faculty consistently described students as **relying on a limited and rigid definition of credibility**, often equating it with surface-level signals such as professional appearance, institutional affiliation, or search engine ranking. Students were described as **less comfortable evaluating credibility across different contexts** (e.g., community-based knowledge, practitioner expertise, journalism, or lived experience) and often struggled to justify why a source was appropriate for a specific academic or personal purpose.

> **Students tend to think that if something looks polished or comes from a familiar website, it must be credible. They don't always ask whether it's the right kind of source for the question they're trying to answer. -Interview participant**

Faculty noted that students **do not consistently evaluate whether information is current or accurate** in relation to the topic or discipline. While dates may be checked, students often lack understanding of how timeliness varies by field or issue, leading to the use of outdated or contextually inappropriate sources.

> **They'll check the date, but they don't always understand whether being current actually matters for that topic, or why. -Interview participant**

SUPERFICIAL EVALUATION OF CREDIBILITY AND AUTHORITY

Faculty noted that while students may recognize common evaluation criteria, such as author, domain, or publication date, they often **apply these indicators mechanically rather than engaging in deeper critical judgment**.

At the same time, faculty emphasized that students **rarely consider how information is produced, funded, or distributed**. Limited awareness of editorial processes, organizational influence, and economic or institutional pressures lead students to take sources largely at face value, without questioning whose interests are represented or amplified.

Together, these patterns limit students' ability to critically assess authority and reliability in context, particularly when sources appear polished or legitimate but warrant closer scrutiny.

> **They can tell me who the author is, but they struggle to explain why that author should be trusted, or not, for this particular topic.**
> **-Interview participant**
>
> **There's very little questioning of who is behind the information or what interests might be shaping it. Students often take sources at face value.**
> **-Interview participant**

WEAK VERIFICATION AND CORROBORATION PRACTICES, INCLUDING AI-GENERATED CONTENT

Faculty widely reported that students rarely verify information across multiple sources. Rather than cross-checking claims or engaging in lateral reading, students often rely on a single source, particularly one that supports their existing views or appears authoritative.

This pattern is intensified by growing use of generative AI. Faculty described students as struggling to identify when content is machine-generated and to evaluate the limitations of AI-produced information. AI outputs are often treated as neutral or reliable, without verification against human-generated sources or independent evidence.

As a result, students may accept information that sounds confident or plausible without adequately assessing its accuracy, provenance, or reliability.

> **Once they find a source that supports their point, they stop looking.**
> **-Interview participant**
>
> **There's a tendency to assume it's reliable if it sounds confident.**
> **-Interview participant**

DIFFICULTY DISTINGUISHING FACT, OPINION, AND MISINFORMATION

Faculty expressed concern that students **struggle to differentiate between evidence-based claims and opinions**, particularly in persuasive or emotionally charged content. Students were described as having **difficulty identifying misinformation**, especially when it is embedded in otherwise credible-looking sources.

> **Students often blur the line between fact and opinion, especially when the writing sounds authoritative or aligns with their views. -Interview participant**

SYNTHESIZING AND SHARING FINDINGS ETHICALLY

SYNTHESIS AND CONCLUSIONS LACK MEANING-MAKING AND INTEGRATION

Faculty frequently described students as **assembling information from multiple sources without integrating ideas into a new conclusion or understanding**. Rather than synthesizing across perspectives or evidence, students often organize sources side by side or restate what individual sources say, struggling to move from "what the sources say" to "what this means."

As a result, conclusions are often underdeveloped, predictable, or disconnected from the evidence gathered. Faculty noted that students may complete the research process without revisiting their original question or clearly articulating how their findings led to a refined or original understanding.

> **Students are good at pulling quotes from different sources, but much less confident when it comes to explaining what those sources collectively suggest. -Interview participant**
>
> **[The conclusion] can feel like an afterthought rather than the outcome of the inquiry. -Interview participant**

LIMITED ATTENTION TO AUDIENCE AND ETHICAL RESPONSIBILITY IN SHARING INFORMATION

Faculty indicated that students most often frame research products solely for an instructor as the audience, with **limited consideration of how findings might be communicated responsibly to audiences beyond the classroom**. When sharing

information, students were described as prioritizing assignment completion over clarity, relevance, or potential impact.

In addition, faculty described many cases where students often do not consider the ethics of sharing information, such as responsible representation of sources, accurate attribution, and thoughtful framing of conclusions. While citation requirements may be met, faculty noted less attention to the broader responsibility that accompanies interpreting and sharing information.

> **Students tend to write for me, not for an audience. -Interview participant**
>
> **They know they need to cite sources, but they don't always think about the responsibility that comes with interpreting and sharing that information. -Interview participant**

REFLECTION ON THE RESEARCH PROCESS IS LIMITED AND OFTEN PROCEDURAL

Faculty noted that student reflection on the research process, when present, tends to be procedural rather than analytical. **Reflections were described as focusing on task completion ("what I did") rather than evaluating effectiveness**, identifying strengths and weaknesses, or considering how research practices could be improved.

When students do identify areas for improvement, faculty observed that these are often framed in terms of **grading criteria rather than deeper learning**. Reflection is frequently compliance-driven, aimed at earning points or meeting assignment requirements, rather than curiosity-driven or focused on strengthening understanding, synthesis, or communication.

> **When students reflect, it's usually a description of the steps they took, not an evaluation of how effective their research actually was. -Interview participant**
>
> **Students are more likely to say they'd improve something to get a better grade than to explain how they'd improve the quality of the research or the conclusions. -Interview participant**

LIMITED USE OF FEEDBACK AND ITERATIVE INQUIRY

Faculty responses suggested that **students rarely engage in research as an iterative process that incorporates feedback, revision, or the identification of next steps**. While students may engage in basic self-evaluation, there was limited evidence of peer

review, revision based on critique, or sustained inquiry beyond the completion of an assignment.

Research was commonly framed as a finite task rather than an evolving process. Some faculty described students as rarely identifying additional information needs, asking follow-up questions, or viewing research as a foundation for future exploration.

> **Students will sometimes talk about what they think they did well, but there's less engagement with peer feedback or revising based on critique. -Interview participant**
>
> **Once the paper is done, the research is done. There's not much sense of 'what would I explore next?' -Interview participant**

INFORMATION LITERACY GAPS NEGATIVELY AFFECT TEACHING AND, ULTIMATELY, STUDENT LEARNING

IMPACT ON TEACHING

Information literacy gaps force instructors to shift time away from disciplinary learning toward remediation of foundational skills. Faculty consistently reported needing to slow instruction and devote substantial class time to reading comprehension, source evaluation, argument construction, professional communication, and technology use, often at the expense of deeper content and applied learning.

As a result, instructors described cutting readings, reducing content coverage, and restructuring courses around step-by-step scaffolding and process-based instruction. Increased time spent clarifying expectations, managing communication, and providing individualized support limits opportunities for higher-order discussion, professional connection, and intellectual depth.

Emerging technologies, particularly generative AI, further complicate teaching. Faculty reported increased challenges related to academic integrity, source credibility, and assessment, prompting shifts toward in-class work, process documentation, and alternative forms of evaluation. Many also noted the need to teach basic digital and information skills outside their disciplinary role due to uneven student preparation.

Faculty emphasized the **emotional and ethical toll** of these shifts, including frustration, inefficiency, and concern about academic standards. Several described ongoing tension between accommodating student needs and maintaining expectations for college-level work, with remediation increasingly displacing core course goals.

IMPACT ON STUDENT LEARNING

When foundational information literacy skills are not developed early, learning gaps compound over time. Faculty described cumulative effects on student learning, with students struggling increasingly in upper-level courses to meet academic expectations and prepare for professional work.

Across disciplines, instructors observed shallower engagement with course material, including difficulty analyzing texts, synthesizing sources, and applying information to new contexts. Students often approach assignments as isolated tasks rather than parts of a coherent learning process, resulting in surface-level understanding and weak or generic conclusions.

Students also struggle to evaluate credibility and navigate uncertainty, frequently viewing information as either equally valid or wholly untrustworthy. Overreliance on generative AI further reduces opportunities to practice synthesis, judgment, and independent reasoning.

These gaps affect **motivation, confidence, and participation**. Faculty reported that students who fall behind in reading or research often disengage or avoid seeking support, compounding learning challenges. Time spent navigating basic skills and logistics diverts attention from course goals and limits opportunities for deeper intellectual growth.

Faculty emphasized that these impacts extend beyond individual courses, affecting students' readiness for civic engagement, collaborative learning, and careers that require evaluating information, adapting to new knowledge, and learning independently.

Evidence: The case for investing in K-12 library specialists to improve information literacy

In their interviews, post-secondary faculty point to the urgent need to improve students' information literacy skills, and to build and better hone those skills *before* students arrive at college. A review of existing literature shows that K-12 library specialists have the potential to achieve those aims.

> In today's digital world, students must be able to think critically, evaluate sources, and understand media messages' influences—and this must become a habit developed via every subject they study at all grade levels, so that students develop the foundational and advanced-level skills they need to meet the challenges of engaging in democratic society today" (Hobbs et al., 2025, pg. 5).

Library specialists' effect on K-12 student proficiency

More than 50 years of research has illustrated the correlation between having library specialists in K-12 schools and increased student proficiency in subjects like reading and math (Burress et al., 2023; Otero Martinez, 2024; Wine et al., 2023).

The positive effects that library specialists have on student achievement appear to increase as their FTE status increases. Data from a Missouri study show that student proficiency rates were significantly higher in English language arts, science, and math when there was a full-time librarian at the school (Burress et al., 2023). While a full-time school librarian provides the best learning advantage, "students enrolled in schools with a part-time school librarian have a learning advantage over those in schools with no school librarian" (Burress et al., 2023, pg. 13). In other words, a part-time school librarian is more beneficial than having no librarian at all.

The literature also states that licensed library media specialists have a proven track record of supporting students across a variety of subjects. Trained librarians "teach students about inquiry skills, evaluating information, and using multiple literacies (including print and digital). They also collaborate with classroom teachers and provide professional development to teachers" (Wine et al., 2023).

Minnesota's status

Findings from the 2024-25 School Library Status (Minnesota Department of Education, 2025) show that:

- 250,375 Minnesota students across 521 schools had no access to a licensed school library media specialist.
- Only 19% of school libraries meet the full statutory definition (see Minnesota Statutes 2023, section 124D.911 for definition).
- Minnesota ranks 46th nationally in FTE per school for school library staff.

Information literacy is complex and requires collaboration

While data show the importance of having a full-time library specialist at K-12 schools, it is also important to avoid laying the responsibility of information literacy instruction solely at their feet. The wide range of topics included in "information literacy" necessitates on-going instruction that is embedded throughout classrooms and lessons.

> Because there are so many different types and forms of media, media literacy is not one simple thing. It's a constellation of competencies that reflect the full complexity of human communication in a world where digital technologies are the norm (Hobbs et al., 2025, pg. 15).

While this article is specifically focused on "media" literacy, much of its findings apply to the broader concept of "information literacy." In their study of Massachusetts educators, the authors highlight the frustrations of educators who feel overwhelmed by having to teach media literacy on top of their classroom subject, as well as several successes involving educator collaboration to improve students' media literacy skills. A major finding of the report is that there are several examples of "effective media literacy in Massachusetts schools, including evidence of strong and successful collaboration between social studies teachers and school librarians" (Hobbs et al., 2025, pg. 6).

Ultimately, existing literature on this topic supports several key points:

1. Like the post-secondary faculty who were interviewed, many K-12 educators are concerned about gaps in student information literacy skills, especially given the near-constant flow of information to which students are exposed.
2. K-12 library media specialists are uniquely skilled and qualified to teach information literacy, which helps students prepare for college, career, and civic engagement.
3. Information literacy is complex and requires collaboration between educators and integration across classroom learning. Library media specialists can take a lead role in information literacy, but that work should not fall solely on them.

Recommendations

ADVICE FOR K-12 EDUCATORS AND ADMINISTRATORS

Faculty emphasized that preparing students for postsecondary learning requires a shift from content coverage and task completion toward **intentional development of core skills**, particularly information literacy, reading, research, and ethical technology use. While acknowledging the constraints of K-12 systems, faculty encouraged **changes that prioritize long-term learning over short-term performance**.

Below are several recommendations based on faculty input.

- **Treat information literacy as a foundational skill requiring explicit instruction, not an incidental outcome of assignments or technology use:** Faculty noted that higher education has learned, often the hard way, that assuming students will "pick up" these skills leads to uneven preparation. Several suggested recognizing information literacy as a distinct area of instruction and supporting it through intentional integration and specialist expertise.

> **We've learned in college that assuming students just 'pick up' writing doesn't work. Information literacy needs the same kind of explicit attention.**
> **-Interview participant**

- **Slow down and emphasize the research process:** Slowing down allows students to experience research as inquiry rather than as a step toward a product. When research is rushed or framed only as a requirement for an assignment, students tend to engage superficially and miss opportunities to evaluate sources, synthesize ideas, and reflect on their learning. Some faculty urged a greater emphasis on process over performance. High-stakes grading and pressure to get the "right" answer were seen as limiting students' willingness to take intellectual risks, revise work, or persist through complexity, habits essential for research and critical thinking.

> **When research is only a step before writing a paper, it shortchanges evaluation and understanding. -Interview participant**
>
> **Students come in thinking learning means getting it right the first time, which makes real inquiry hard. -Interview participant**

- **Strengthen reading comprehension and synthesis skills beyond early grades:** Faculty observed that many students arrive at college struggling to read complex texts, extract meaning, and connect ideas across sources. They encouraged sustained attention to teaching how to approach difficult texts and engage deeply with information.
- **Support ethical and transparent instruction on AI and digital tools:** The growing role of AI and digital tools surfaced as an urgent instructional need. Faculty encouraged teaching students how these tools work, when they are appropriate, and how to evaluate their outputs, rather than avoiding or banning them.
- **Align policies, standards, and accountability systems to support deep learning, curiosity, collaboration, and help-seeking:** Faculty highlighted the importance of student agency, curiosity, and choice. Allowing students to explore meaningful questions and topics of interest was seen as key to engagement, synthesis, and ethical information use. Finally, faculty emphasized normalizing help-seeking and collaboration, including working with librarians, asking questions, and using available resources. Students who view help-seeking as a strength, faculty noted, are better prepared to succeed.

> **Knowing when and how to ask for help is a sophisticated skill, not a weakness. -Interview participant**

CONSIDERATIONS FOR POLICYMAKERS

Faculty responses emphasized that policy decisions play a significant role in shaping students' preparedness for postsecondary learning, particularly in areas related to information literacy, research, reading, and critical thinking. Across responses, faculty encouraged policymakers to consider how structural incentives, accountability systems, and resource allocation influence instructional priorities and student learning experiences.

> **…when these standards are integrated into curriculum without the expertise of a library or information professional, there's no responsibility or accountability for bringing these skills into the classroom. When it's on all teachers equally to try to fit it into their subject matter, it doesn't happen effectively. Having information professionals/librarians on staff, paid effectively, and supporting all subject areas from K–12 onward seems essential. -Interview participant**

Faculty also urged policymakers to recognize **information literacy and research as essential, foundational skills**, rather than optional or supplemental ones. Several responses suggested that clearer policy guidance, standards alignment, and dedicated support could help elevate these skills across grade levels and subject areas.

Another strong consideration was the need for **adequate staffing, training, and resources**, particularly access to librarians, media specialists, and instructional support personnel. Faculty noted that students who have consistent exposure to trained information professionals are better prepared to navigate complex information environments in college and beyond.

> **Students who've worked with librarians or media specialists come in with a much stronger foundation." Interview participant**

Faculty frequently highlighted **reading comprehension as a cross-cutting policy issue**, observing that difficulties with reading complex texts limit students' ability to engage in research, evaluate sources, and synthesize information. They encouraged sustained policy attention to reading instruction beyond the early grades, including support for discipline-specific reading strategies.

The growing influence of **artificial intelligence and digital tools** also emerged as an area requiring thoughtful policy engagement. Faculty cautioned against reactive or restrictive approaches and instead encouraged policies that support ethical use, transparency, and instruction focused on understanding how technologies work and how to evaluate their outputs.

> **AI isn't going away. Policy needs to focus on teaching students how to use it responsibly, not just banning it. -Interview participant**

Faculty also encouraged policymakers to consider how policies shape **student agency, curiosity, and help-seeking behaviors**. Systems that prioritize compliance, speed, and individual performance were seen as discouraging collaboration, reflection, and persistence, skills faculty view as critical for postsecondary success.

> **Students do better when they're encouraged to ask questions and take intellectual risks, not just follow directions. -Interview participant**

Finally, a concern for some faculty was the **high-stakes accountability and standardized testing pressures** that can unintentionally narrow instruction and negatively affect learning. Faculty noted that when schools are incentivized to prioritize test performance and content coverage, there is less time and flexibility for developing complex skills such as evaluating information, synthesizing ideas, and engaging in inquiry-based learning.

> **When everything is tied to testing, deeper skills like research and critical thinking get pushed aside. -Interview participant**

Methods

RECRUITMENT

Minitex and its partners, including librarians from several postsecondary institutions, identified 32 faculty members from two- and four-year institutions across the state who engage with first-year students to invite them to participate in the study. Of those invited, 22 individuals completed a short survey, and 21 of those surveyed participated in a follow-up interview.

Participants represented a range of disciplines, including faculty who teach introductory (101-level) courses in sociology, geology, clinical psychology, English, humanities, agricultural education, and history; faculty who teach first-year experience or writing courses; and one librarian. Participants were affiliated with the following institutions:

- University of Minnesota–Duluth
- Hamline University
- Normandale Community College
- Minnesota State University–Mankato
- University of St. Thomas
- St. Cloud State University
- Southwest Minnesota State University
- Anoka-Ramsey Community College
- University of Minnesota–Twin Cities
- Minneapolis Community and Technical College

BRIEF SURVEY AND INTERVIEWS

Wilder Research worked closely with Minitex and partners to develop a short survey to inform faculty interviews. The survey aligned with the 2025 ITEM standards and asked faculty to indicate whether they observed no noticeable gaps, minor gaps, moderate gaps, or significant gaps among first-year students across key benchmarks within four learning strands: information literacy, digital citizenship, technology and innovation, and literacy engagement.

Because interview time was limited, the interviewer prioritized questions based on participants' survey responses. For example, if a participant rated digital citizenship as

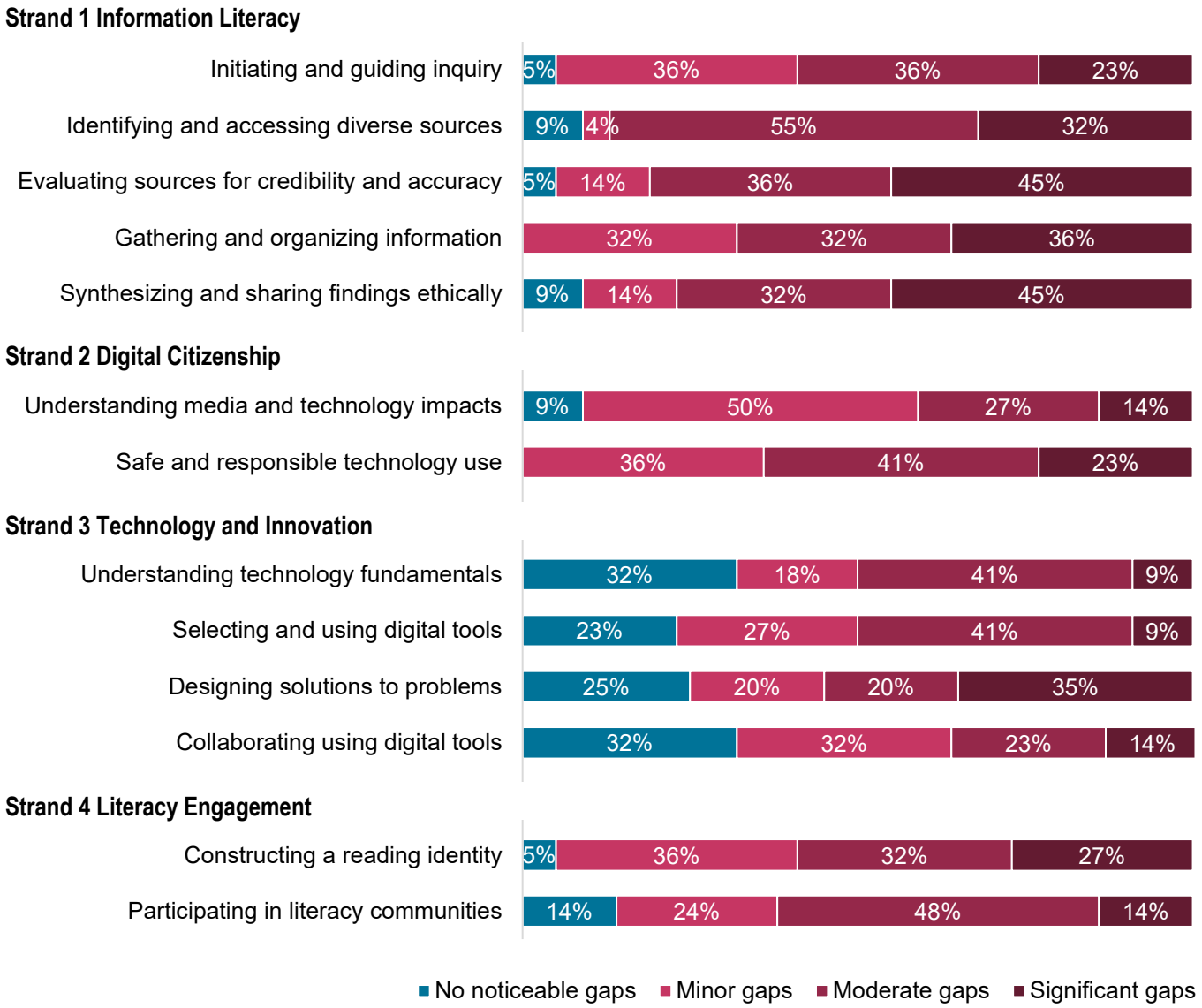
having the greatest skill gaps, the interview began with questions about faculty observations in that area. The survey instrument and interview protocol are included in the appendix.

The survey was completed online prior to the interview. Participants received their survey responses in advance of the interview so they could refer back to them if needed. Interviews lasted approximately 45 minutes. Most participants had sufficient time to comment on each learning strand.

SURVEY RESPONSES

Overall, faculty identified the most significant gaps in the information literacy and research strand. However, more than half of participants also reported “moderate” or “significant” gaps in literacy engagement (constructing a reading identity and participating in literacy communities), digital citizenship (safe and responsible technology use), and technology and innovation (designing solutions to problems).

Gaps in information literacy skills and knowledge, according to faculty



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Appendix

A. 2025 ITEM STANDARDS

Link: https://docs.google.com/spreadsheets/d/1MWLFY8huH-XaKtzPjazdzw1wj7v8fQAIFW9b0l8QAfU/edit?gid=417162993#gid=417162993

Postsecondary Faculty Survey: First-Year Student Preparedness in Information & Technology Literacy

In 2025, Information and Technology Educators of Minnesota (ITEM) revised the state's Information and Technology Literacy Standards for K–12 schools. These standards outline the knowledge and skills students are expected to demonstrate by high school graduation across four strands:

- Information literacy and research

- Digital citizenship

- Technology and innovation

- Literacy engagement

Through Federal Library grant funding distributed through Minitex and the Multicounty Multitype Library systems, a group of Minnesota high school, college, and university librarians have partnered with Wilder Research to understand how well first-year postsecondary students are meeting these expectations. Findings will be shared with policymakers to help strengthen K–12 education in these areas.

Please complete this brief survey before your interview. Your responses will help guide the conversation and highlight areas where students may need additional support.

For each standard listed below, please rate the degree to which you observe gaps between what first-year students know and are able to do, compared with what is expected of students at this level.

Use the following scale:

1 – No noticeable gaps between what students know and are able to do and what is expected of students at this level.

2 – Minor gaps

3 – Moderate gaps

4 – Significant gaps

Strand 1: Information Literacy

Initiating and guiding inquiry

Students' ability to develop meaningful research questions or subtopics based on personal interests, societal needs, and academic expectations.

1 2 3 4

Identifying and accessing diverse sources

Students' ability to locate sources representing multiple perspectives and use effective search strategies (keywords, filters, advanced techniques).

1 2 3 4

Evaluating sources for credibility and accuracy

Students' ability to verify information, recognize misinformation or fake news, compare AI-generated vs. human-generated content, distinguish fact from opinion, and use lateral reading.

1 2 3 4

Gathering and organizing information

Students' ability to find relevant information within sources, take notes, and cite sources appropriately.

1 2 3 4

Synthesizing and sharing findings ethically

Students' ability to synthesize information, draw conclusions, and communicate findings to audiences beyond the classroom.

1 2 3 4

Strand 2: Digital Citizenship

Understanding media and technology impacts

Students' ability to reflect on and manage their digital footprint, identity, and the impact of digital actions on themselves and others.

1 2 3 4

Safe and responsible technology use

Students' ability to identify misleading information, decode media messages (including AI-generated messages), and responsibly exchange information online.

1 2 3 4

Strand 3: Technology and Innovation

Understanding technology fundamentals

Students' understanding of basic technology concepts and ability to accurately describe technology problems using correct terminology.

1 2 3 4

Selecting and using digital tools

Students' ability to use digital tools for tasks and apply computational thinking to solve problems.

1 2 3 4

Designing solutions to problems

Students' ability to create programs using algorithms, sequences, loops, events, conditionals, and nested loops.

1 2 3 4

Collaborating using digital tools

Students' ability to collaborate through digital tools, including real-time features, shared permissions, comments, public content creation, and building learning networks.

1 2 3 4

Strand 4: Literacy Engagement

Constructing a reading identity

Students' ability to understand a variety of genres and formats and connect them to their needs, preferences, and reading habits.

1 2 3 4

Participating in literacy communities

Students' ability to share responses to reading, make personal and cultural connections, and engage with diverse perspectives, including Dakota and Anishinaabe communities.

1 2 3 4

Follow-up interview questions - faculty

Hi, my name is _____ and I work for Wilder Research. We are working with a group of Minnesota college, university, and high school librarians to understand postsecondary faculty perceptions of the preparedness of first-year students in key information and technology literacy knowledge and skills.

The interview should take about 45 minutes. The information you share will be combined with responses from faculty from other postsecondary institutions across the state and analyzed for key themes. The findings will be shared with policymakers in a summary along with findings from previous studies to advocate for information and technology literacy education taught by licensed school library media specialists in K-12 schools.

The interviews are voluntary and confidential. Nothing you say will be associated with your name. Nothing you say will affect your relationship with your institution or any other partner involved in this work.

Do you have any questions before we begin?

If it's okay with you, I would like to record the conversation as a back up to my notes. Is that okay with you? [If yes, hit record]

In the pre-survey, you indicated that [ONE OF THE FOUR STRANDS] was where you noticed the most significant gaps. Let's start with this strand. (NOTE TO WILDER: You may need to refresh their minds on the benchmarks that are included in the strands. Please proceed to ask the following question (1, a. and b.) about all three of the remaining strands)

1. Where do you see gaps between the knowledge and skill first year students are expected to have and the knowledge and skills they had on entry?
    a. (Wilder: use only if the two questions listed here aren't answered in the main question) What does that look like for your students? Please provide examples of areas where students are struggling?
    b. How does this impact your teaching? How does this impact student learning?

2. Which 2-3 knowledge areas or skills from the areas we've discussed are most essential for students to succeed in your course(s) or program?

3. If you could give advice to K-12 educators or administrators about preparing students for postsecondary success related to the areas we've discussed, what would it be?

4. Is there anything else you think policymakers should understand about student preparedness in this area or how postsecondary institutions experience these gaps?

Thank you so much for your time and energy to support this important work.

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