



HAWTHORN ACADEMY
Floyd Stensrud, Superintendent

South Jordan Campus
Jeremy Craig, Principal

West Jordan Campus
Elementary - Brenda Anderson, Principal
Middle School - Kristi Kunz, Principal

The matter before the Charter Board is whether Hawthorn Academy should discontinue the IB program.

Issues:

1. Should Hawthorn Academy discontinue the International Baccalaureate (IB) program?

The main points for discontinuing the IB program are as follows:

- Hawthorn Academy is currently a Targeted School Improvement (TSI) District.
- IB does not support Hawthorn Academy's focus on Standards-Based Grading with an emphasis on Standards-Based lesson planning and assessments currently supported by the state of Utah.
- Students at Hawthorn need to master grade level curriculum in math, reading, and language arts. The IB curriculum is separate from a focus on grade level curriculum and focuses instead on international tenets of inquiry, collaboration, and good citizenship.
- IB does not allow for a single focused approach on academic achievement gaps and mastery and, therefore, does not align with a targeted, data driven approach on learning proficiency and student academic growth.
- Hawthorn Academy's current **Land Trust plan** written for the upcoming 2023-2024 school year addresses areas of need in math, language arts, and science, which are targeted for increased proficiency and growth and an emphasis in literacy.

2. Should Hawthorn Academy continue with a Science, Technology, Engineering, Math focus (STEM), which supports Standards-Based Grading and our **Land Trust** focus in the areas of math, language arts, science, and literacy?

- The STEM curriculum provides Hawthorn Academy with one curricular emphasis focused on Standards-Based Grading. The IB program does not correlate to Standards-Based Grading.
- STEM is embedded in 21st Century learning skill development and focuses on the four "Cs" of communication, collaboration, creativity, and critical thinking, which are inquiry based.
- 21st Century skill development can replace the IB Learner Profiles. They are very similar in nature, but 21st Century Skills are universal.
- Hawthorn Academy's current School Improvement Plan (SIP) emphasizes a standards-based approach to assessment and learning.

Position:

The International Baccalaureate (IB) program was introduced to Hawthorn Academy through its charter in 2009. IB's original intent was to create inquiry and build character in the primary years (k-5) and provide a transdisciplinary thematic approach to instruction. The Hawthorn Academy charter states that, "IB is not a program of curriculum content, but rather a highly respected method for organizing and teaching the curriculum of a school's choosing." The IB methodology is created around six transdisciplinary themes that are to be embedded into the state core or the school's curriculum of choice. IB is an inquiry-based problem-solving methodology. The IB methodology is only incorporated at the elementary level or Primary Years. The lack of IB

inclusion at the secondary level has created a major gap or disconnect in the continuity of the program's implementation as students have moved from elementary to middle school. Because IB does not create a targeted instructional approach emphasizing proficiency and academic growth but rather a transdisciplinary thematic methodology with a separate curriculum mapping structure, IB has not proven useful to a student's academic success at Hawthorn Academy.

STEM also espouses this same methodology type but without the focus on themes and planners and a separate curriculum mapping structure, which has proven cumbersome for teachers. A shift to a Science, Technology, Engineering, and Math (STEM) focus at all grade levels, K-9, that allows for full integration with a single curricular emphasis and aligns with state standards providing for targeted instruction in the areas of science, math, and literacy and prioritizes academic achievement and a well-rounded, research-based, approach to student learning is a more inclusive and productive approach. Hawthorn Academy students need more targeted and systematic learning and instruction where key assessments would lead to higher academic achievement and allow for comprehensive standards-based instruction.

History of IB and STEM:

The Hawthorn Academy charter references IB throughout, and its original intent was to provide a global approach to educating students with an international focus in the areas of inquiry, collaboration, reflection, creativity, critical thinking, risk taking, etc. One of the problems with this focus is that it was only accomplished in the primary years grades and was never integrated at the middle school even though the middle school was supposed to integrate the elements of IB in spirit. The implementation of the spirit of IB at the middle school level never fully came to fruition as envisioned. The terms were referred to, but the full integration of IB could never be realized because the fee was never paid to integrate IB at the middle school level. The fee was only paid for one school technically because the district was ostensibly viewed as a school. This meant that the West campus was fully recognized as an IB campus, but the South campus, after much consultation with IB, will now be fully recognized with an additional fee paid to the IB organization. The South campus has been fully participatory although the fee for the South campus was never paid. The IB curriculum also has its own separate curriculum with separate planners that teachers must include in their daily teaching practice in addition to their regularly prescribed state curriculum, which poses a major burden for teachers with the daily implementation of two separate curricula and two separate planning systems.

- Moving to STEM would remove the fee element and would allow for full integration at all levels, both elementary and middle, and would allow teachers to focus on a Standards-Based single state supported curriculum with available grants for additional funding. Hawthorn Academy has access to a thorough, research-based, self-evaluation of strengths and areas of improvement with feedback from the STEM community, and this research was produced and is updated by the University of Chicago's Outlier Research Group and is used nationally to identify schools with an intentional STEM focus.
- In 2019 Hawthorn Academy was recognized by the Utah State Office of Education as a TSI school district. Our academic progress in math and reading fell in our special education population. A needs assessment and root cause analysis have not yet been conducted at Hawthorn, but a method for moving forward to address these high priority concerns are under way. In the fall of 2022, Hawthorn's administration hired a new special education director and a curriculum and assessment director, and we have hired an additional instructional coach and literacy specialist to address needs in the classroom to begin in the fall of 2023. We have also hired effective this year an IB/STEM coordinator with a STEM endorsement, which is recognized in the state of Utah.

Explanation:

Even though the IB program and methodology espouses inclusion of all populations—the goal certainly is to ensure that all students feel that they are accepted in their course of study—a recent post to *Equity and Inclusive Education in the IB*, stated that reduced barriers and full participation is a high expectation with an IB program. Part of the problem that Hawthorn faces in relation to this mantra, however, is that a dual curricular emphasis can be confusing for students and cumbersome for teachers. When speaking with the folks who oversee the program and who are in charge of oversight of Hawthorn Academy, there are strict guidelines and fee and training schedules that must be followed that results in a heavy response from teachers who feel that this approach is fitting a square peg into a round hole. The terms and curriculum focus do not fit the standards-based curriculum that is data driven with academic achievement and literacy as its main drivers. IB's emphasis on self-directed learning is, as mentioned, not standards-based or assessment focused.

Aspects of IB that are appealing and that will remain at Hawthorn are the character traits that parents like to see taught and the cycles of inquiry and reflection that can be easily incorporated in any STEM-based curriculum. Hawthorn focuses on college and career readiness. Colleges also appreciate schools that focus on STEM because of the closure of “opportunity gaps” where the private sector can engage with STEM schools and interact more directly with students in the learning environment. The IB curriculum offers this opportunity also from a transdisciplinary approach, but STEM can also fill this need covering interdisciplinary as well as transdisciplinary areas of study. This opportunity gap also closes as we continue to enhance our awareness and inclusion of the arts programs at Hawthorn and our intense focus on building literacy skills in all areas of the curriculum. The inclusion of arts when related to mathematics and science also enhances comprehension for students with disabilities, including autism.

In the *Journal of Science Education*, Hwang and Taylor, 2016, state that “students with disabilities perform below their peers without disabilities in math and science.” They also note that students from elementary school-age through their high school years and even into college have difficulty succeeding in mathematics and science. This severity is only compounded when comparing students with disabilities to their peers.

This does not deter from the fact that STEM is still an ambiguous buzzword in education today. One way that Hawthorn can better recognize the importance of STEM as it relates to all students at all grade levels is to refer to it as an “interdisciplinary instructional approach when teaching STEM-related content” rather than merely teaching it as “only one of several areas of the four disciplines” (*Hwang and Taylor, 2016*). As these authors suggest; it is not merely about what you know and think is important to teach, but it is as much or more about “*what you can do with what you know.*” It gets back to the four important questions every teacher should be asking in every lesson. IB does not touch on these four important questions.

Analysis of the IB Program at Hawthorn Academy:

A survey was given to teachers in December of 2022 asking them whether they still felt that the IB program was an important and viable part of their curriculum activities. One teacher out of 76 in the district answered “yes.” The following is a graph showing these results:

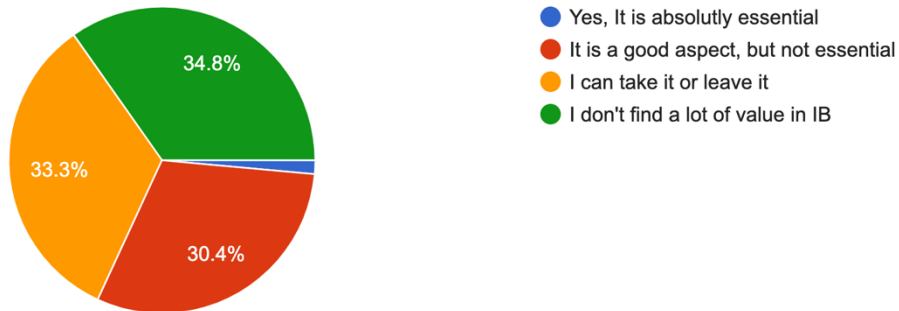
Survey Data:

Graph 1:

Teacher Responses: of 76 teachers and certificated staff there were 69 responses

Do you feel that IB is an essential program to the success of Hawthorn Academy

69 responses



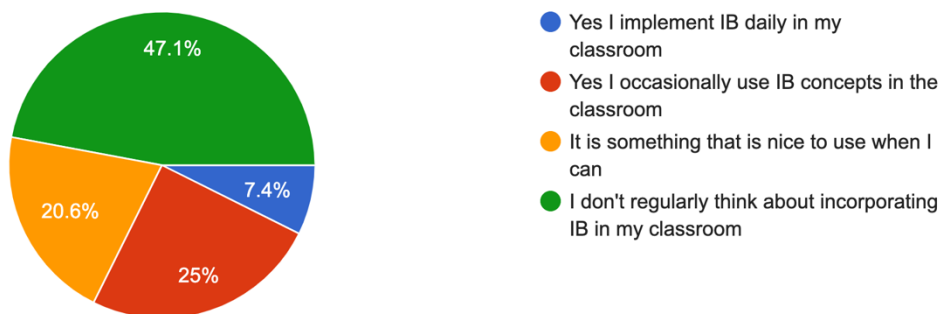
The graph shows that 30.4 percent of teachers and certificated staff feel that the IB program has merit but is not essential to the district's success. 68 percent do not really find value in the IB program. This shows that Hawthorn Academy can still incorporate the core values of IB such as inquiry, problem solving, seeking knowledge, being caring, being courageous, collaborating with peers and adults, and incorporating good communication skills, etc., without having to purchase the IB stamp each year or participate in unnecessary teacher training that are already incorporated in the STEM curriculum, and that these values can be incorporated at every grade level (K-9) including 21st century skills involving communication, collaboration, creativity, and critical thinking.

Graph 2:

This next graph had a total of 68 responses:

Do you hold IB as a core value in your instruction

68 responses



This graph demonstrates that 32.4 percent of teachers occasionally or daily use IB in the classroom. 67.7 percent rarely if ever use the IB values in their instruction. One of the main issues resulting from low use may be the focus on standards-based instruction and academic progress and growth. IB does not consider either of these foci in its curricular implementation. Another potential issue may result from the fact that the IB program

demands a separate curricular mapping structure different from the academic curricular mapping structure. This demand on teachers' time and effort to produce two curricular emphases has discouraged teachers from using the IB program in the classroom to its fullest extent.

The 49 teacher written responses suggest that they are either in favor of IB, as one respondent makes clear, or that they are in favor of switching to STEM or that they are in favor of choosing one curricular focus in order to clear teachers' plates of extra assignments and duties that do not fit a relevant student academic focus.

For example, one teacher stated that, "I enjoy IB. I would like to do more with IB than what Hawthorn is doing with it now." Another few teachers commented in relation to supporting another method or philosophy with, "I feel our school needs something to set us apart from other schools and it needs to be attractive and offer value. I feel I.B. does this but it is not living up to its potential at this point. . . . If we decided to move away from IB I think we should still find a way to incorporate positive learning traits and characteristics within the school."

Another teacher finds it cumbersome to maintain two curricula with this comment, "I don't think IB improves my instruction or is a helpful resource. It's like writing lesson plans twice--first from the standards and curriculum we have adopted and then in the planners that are not helpful at all."

These comments provide perspective into why a shift to a new curricular focus will create within the Hawthorn Academy instructional environment an opportunity to engage students at all grade levels in areas that are already of interest within the STEM arena, but it will also shift money and resources back into the classroom rather than away from the student and teacher, which is where these resources would be best utilized and with a standards-based, 21st century integrated model.

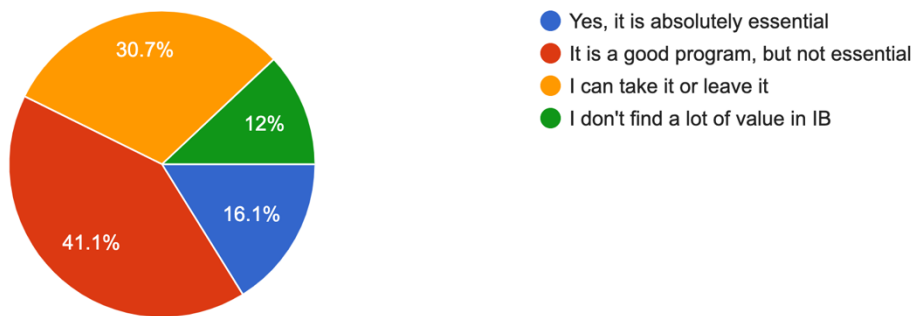
Parents were also given the opportunity to respond to a survey relating to the merits of the IB program. Of the more than 700 families who were surveyed, 205 responses are referenced below:

Parent Responses:

Graph 1:

Do you feel that IB is an essential program to the success of Hawthorn Academy?

192 responses



From the data in this graph, parents feel that the IB program has merit, but that they are not committed to it at Hawthorn Academy. A small percentage feel that the program is essential and have probably found that the tenets and principles found in the IB program have benefited their students in a positive way. Another small percentage feel that the program does not have much value at all. This may be because they do not see Hawthorn Academy as an IB focused school or that their students don't really do much with the tenets or beliefs of IB outside of school.

One parent describes it this way: "I feel like IB could be very useful, but that Hawthorn has not implemented it well. Honestly, I don't think most of the teachers could even describe IB. My children could tell me the traits, but didn't really know what IB is."

Another parent stated that, "I feel it is more geared towards students who are high achievers and looking for ways to advance their academics."

Other comments are as follows:

"Please do not stop teaching the students to live by IB traits, even if you officially get rid of the program. I feel like it is extremely important!"

"I think it's definitely more universal for all students. Teachers can have an emphasis and highlight stem learning."

"I do think it would be beneficial to keep. I hope that the traits are going to be embedded into my children as they grow and develop, but I don't know if the program (as it is now) has a strong enough emphasis for that."

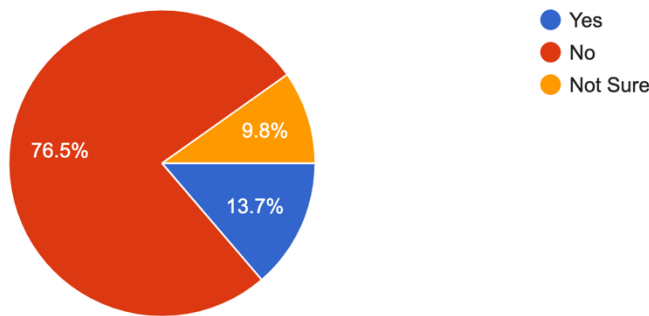
"I like STEM."

"There are other things that would benefit Hawthorn. Especially if it was implemented correctly and more thoroughly than IB."

Graph 2

Charter schools are required by the state to have a "curricular emphasis." Would you object to Hawthorn Academy moving to a new curricular emphasis (Science, Technology, Engineering, and Math)?

204 responses



This graph is self-explanatory and shows an overwhelming number of parents in favor of moving to a new curricular emphasis at Hawthorn Academy.

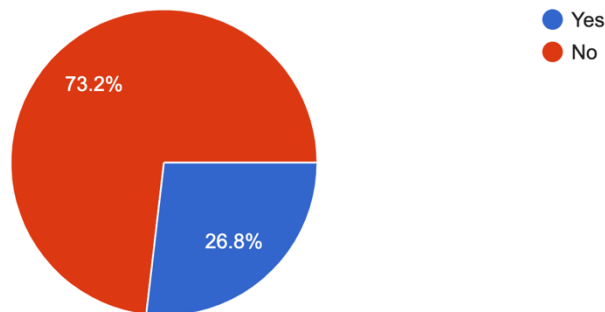
Student Responses:

Students participated in a survey answering questions about the impact of IB on their educational experience at Hawthorn Academy. Of the 663 students who were given the opportunity to take the survey in grades 4-9, 298 responded. Their responses are recorded below:

Graph 1:

Do you know what the International Baccalaureate Program stands for?

298 responses

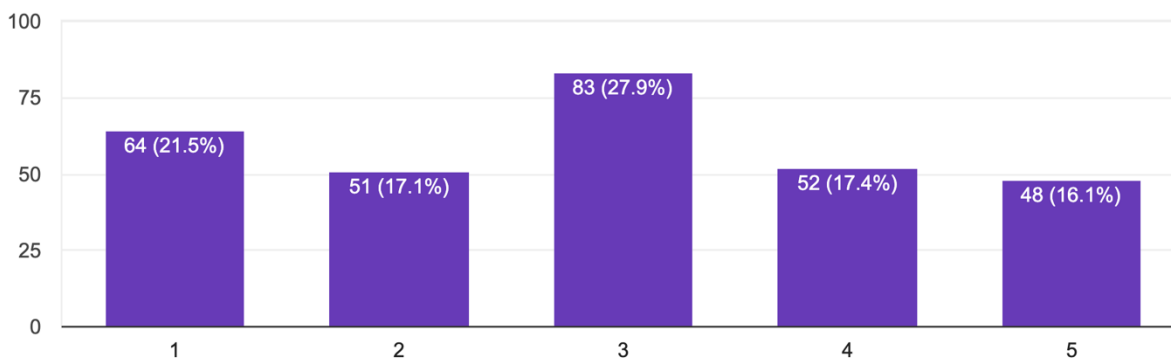


The information in this graph clearly illustrates that those who do understand what the IB program stands for is at the elementary level most likely and that the majority of those who may have taken the survey at the secondary level do not understand its meaning or intent because there is no implementation of the IB program at the middle school level. I believe that those at the elementary level who do not understand its intent or meaning is because the IB program is not being implemented in those students' classrooms. It may be that the terms are referred to, but it clearly does not mean that the program tenets are incorporated in the curriculum being studied.

Graph 2:

How important has the IB Program been to your experience at Hawthorn Academy?

298 responses



Although this graph illustrates some impact of the IB program on students' experience at Hawthorn Academy, the majority of responses, at least 98 percent (not shown in this graph), suggest that there is no correlation to their experience at Hawthorn and IB's level of importance to that experience.

Conclusion:

It is apparent from the teacher, parent, and student data that a shift from the current IB curriculum focus to a STEM focus would be advantageous to Hawthorn Academy. This conclusion also shows that in at least three Board of Directors meetings held in January, February, and April, the Board supported shifting away from IB to a STEM curricular focus. There were two main reasons for this shift in thinking. One reason boils down to the

money that is expended each year for a program that is creating a burden for teachers and creating a dynamic where two curricular emphases are encouraged rather than one, which compromises student academic achievement. A second rationale for the shift is that IB is not a focus at the secondary level, thus leaving out grades 6-9 in a philosophy and learning methodology that should include all grade levels.

A STEM emphasis would be included at all grade levels and would be incorporated in the standards-based curricular approach already embedded at Hawthorn Academy and supported by the state of Utah. Although the IB program does espouse important tenets that are fundamental to a student's executive skill development, A STEM emphasis would also incorporate these same tenets in a more productive, real-world approach and would be consistent with a one curriculum emphasis eliminating the need for IB required planners and an additional curricular ancillary to the existing and required state level curriculum. Funds and STEM resources being put back into the classroom rather than being removed from the classroom would also provide teachers with additional avenues for enhancing lessons and building upon a STEM curriculum emphasis.

References

International Baccalaureate

<https://www.ibo.org/>

Hawthorn Academy

<https://www.hawthornacademy.org/west-jordan/about-hawthorn-academy>

National Science Teaching Association

<https://www.nsta.org/nstas-official-positions/stem-education-teaching-and-learning#:~:text=STEM%20education%20is%20an%20experiential,college%20and%20career%20readiness%20proficiencies>.

STEM Action Center

<https://stem.utah.gov/>

<https://stem.utah.gov/educators/stem-school-designation-2/>

21st Century Skills

http://cosee.umaine.edu/files/coseeos/21st_century_skills.pdf

US Department of Education

<https://www.ed.gov/stem>

<https://www.edweek.org/education/opinion-why-are-students-with-disabilities-so-invisible-in-stem-education/2020/07>

<https://files.eric.ed.gov/fulltext/EJ1169381.pdf>