

# Developing a Pyramid of Intervention

**STEVEN and REBECCA EDWARDS** provide a framework for assisting students who do not meet minimum academic standards.

**THE** wealth of a school and community can be measured by its ability to educate every child. Since the beginning of formal education in the United States, schools and school districts have highlighted the accomplishments of their top students. At the conclusion of each academic year, and at graduation programs throughout the world, administrators single out a select few who have achieved scholarly distinction. Without question, these students are worthy of such recognition, yet they only represent a small portion of the student population. It could be argued that these students would be successful regardless of the school's efforts, since in most cases each of them has all the pieces of the puzzle in place. But what about the students who continually fail to meet minimum standards? What efforts are being made in schools to assist them in achieving academic success?

## Three core questions

In a professional learning community, there are three core questions with respect to academic achievement.

- What do we want students to learn?
- How will we know if they have learned it?
- What will we do with those students who haven't met minimum standards?

The first question addresses the issue of curriculum, the second focuses on assessment, and the third is a call for interventions. Schools generally devote considerable time and resources on the first two questions. The third, however, is often viewed as a problem attributed to conditions beyond the school's control or scope of responsibility. Interventions for students who fail to meet minimum expectations are often disconnected or they lack the data collection and analysis necessary to significantly address the problems they face. Therefore, these students continue to struggle, adding to the frustration of the student, teacher, administrator and parent.

Most schools have taken steps to develop intervention strategies for students who do not meet minimum standards. However, many of these schools fail to make use of data or establish a plan to meet the needs of the identified population. This article outlines the process that one school used to achieve dramatic results in increasing academic achievement among all students. It is important to note that this process was built upon a strong foundation of careful planning and effective data collection and analysis. The planning and the process will be explained and will serve as a replicable model for other schools to build their own Pyramids of Intervention.

## The Pyramid of Interventions

The Pyramid of Interventions shown in *Figure 1* is based on a

foundation that addresses the needs of a broad population of students. Generally, the number of students decreases as one moves up the pyramid and the interventions become tailored to meet the needs of a more focused population. The illustration represents a pyramid of intervention that was the result of a planning process involving time, energy and resources. Each element of the pyramid will be explained in detail.

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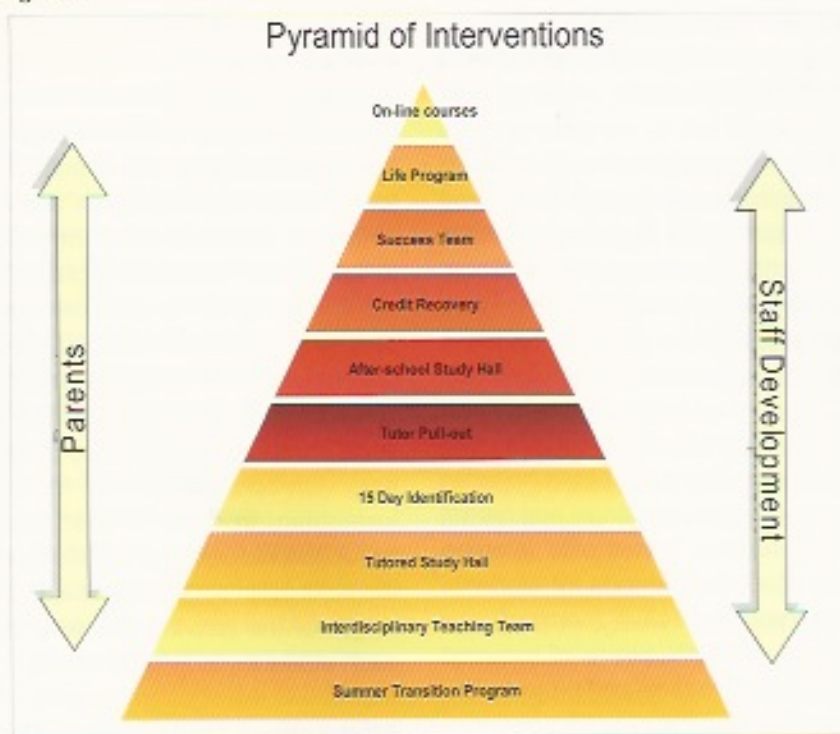
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A number of core components of the planning process are essential when developing a Pyramid of Interventions. They include:

- identifying the problem
- collecting relevant data
- analysing the data
- implementing a plan
- regularly reviewing and evaluating the intervention.

These components serve as the basis for developing a successful pyramid of interventions that will create the opportunity for measurable results. Ultimately, these results will then assist in continuous student improvement.

Figure 1



### Data collection and analysis

The importance of data collection and analysis cannot be overstated. It is essential that schools accurately portray issues relating to low student performance to ensure that the root causes of the problem are clearly identified.

Without accurate data collection and analysis, there is a tendency to operate on perception. Perception lacks a concrete foundation and is often based on opinion, with little or no data to support the conclusions. Only by collecting and analysing relevant data can schools be certain that they are dealing with reality, and not operating on the perceptions of a few. When collecting and examining data, it is important to keep in mind the following points. Data should be:

- quantitative and qualitative
- collected from multiple sources
- relevant
- timely
- consistent over time
- collected by users
- disaggregated.

When examining students who fail to meet minimum academic standards, schools often use student grade distribution reports as one piece of data. Using the data criteria above, we can examine grade distribution reports.

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From a quantitative perspective, grade distribution reports can be broken down by the number and percentage of students receiving each grade. Qualitatively, teachers can be interviewed to explain and interpret the grade distribution for the class based on their students and their grading systems. This data is relevant since it gives a breakdown of student achievement in a particular class, with a particular teacher. This information can then be compared to other

courses of the same subject. The data is timely since it reflects a child's performance over a specific period. This data needs to be collected over time, as it compares a child's performance from one marking period to the next or from year to year. Teachers, department heads and administrators are the users and the collectors of the data. Disaggregating the data into different categories, such as gender and ethnicity, allows teachers and administrators to analyse trends with particular populations. Analysing grade distribution reports are only one example of how data can be a useful tool in better meeting student needs. Adhering to the criteria listed above provides schools with a solid framework from which they can begin to analyse, interpret and use the data they collect.

Using data not only helps identify problem areas, but it also helps identify strengths. When collecting and analysing data, it is important to focus on both problem areas and strengths. Schools should highlight what they do well while at the same time develop a plan to address areas of concern. Doing both with help strike a balance between what's working and what's not. Celebrate what is working by focusing on the sustainability of identified strengths, and develop a plan for working on problem areas that need to be monitored and evaluated. Any new initiative must begin by clearly stated outcomes and evaluation methods.

### Levels of the Pyramid of Interventions

**The Summer Transition Program.** This serves as the base of the pyramid. Prior to entering high school, middle school students are identified as being highly at risk in terms of their success at the next level. In cooperation with teachers, counsellors and administrators from the sending school, high school

personnel work to identify select students who will benefit from such a program. Academic performance, social emotional issues and faculty/administration recommendations provide the criteria for selection.

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The goals of the Summer Transition Program are to acclimatise the students to the high school, to begin forging relationships with the adults with whom they will be working, and to further assess gaps in their cognitive and affective domains. The program runs for three weeks, three hours each day. Certified teachers and support staff instruct students. Staff and students establish relationships that help ease the transition for these students entering high school for the first time.

**Interdisciplinary teaching teams.**

These are the second level of the pyramid and serve as an intervention for all ninth and tenth grade students. Students are grouped in heterogeneous teaching teams comprised of approximately 100 students and four teachers. The teachers represent the four core academic areas, i.e. English, mathematics, science and social studies. Students spend two years in a looping model with the same four teachers and are scheduled into an 80-100 minute teaching block each day. Curriculum is aligned to allow for a natural connection between academic areas.

The advantages of teaming impact both cognitive and affective domains. From a cognitive perspective, teachers have greater contact time with students. Because of this, they better understand students' learning styles and are able to structure the curriculum to foster the transfer of learning across disciplines. In the affective domain, strong bonds are formed between teachers and students due to the increased contact

time between them. This level of contact builds stronger, more lasting relationships between students and teachers.

**Tutored study halls.** These are the third level of intervention and a requirement for all grade nine students. Replacing the traditional study hall, tutored study halls have an increased academic focus. A tutor is assigned to each interdisciplinary teaching team and is an integral part of all team events and activities. The tutor sits in on team classes, team meetings, and parent conferences. Tutors also oversee the study hall periods for students on their respective teams. Since tutors are fully aware of required homework, exams and projects, the study period becomes an opportunity to review, clarify and complete academic assignments. This time serves as a chance to reinforce learning that has taken place in the classroom.

The next level of the Pyramid of Intervention is the 15-day identification system. After the 15th day of school, team teachers are asked to identify all students who are falling behind and not meeting minimum academic expectations. The vast majority of students fall into one or more of four primary causes of failure:

- attendance and tardiness issues
- social and/or behavioral issues
- lack of basic skills
- failure to complete out-of-class assignments.

Based on the cause(s) of failure, the teams are able to provide these students with the appropriate additional interventions they need to succeed. Once team teachers identify students according to the above criteria, they are able to develop an individual intervention plan for each student that will draw on internal and external resources.

Identified students will be selected for a tutor pull-out program, the fifth level of the pyramid. Tutors who are assigned to interdisciplinary teaching teams are afforded a flexible schedule. Flexibility allows for creative scheduling to assist identified students who continue to fall below minimum academic standards. When, and where, appropriate, selected students are pulled out of team activities for one-on-one or small group instruction. At times, these students may be pulled from non-core classes for further instruction. In order to best meet the academic needs of the student, the schedule remains flexible. The length of the tutoring is based on each student's individual needs.

**After-school study period.** This is the next level in the Pyramid of Intervention. A one-hour academic study period is a requirement for identified students. Team tutors who monitor the period provide necessary instruction in core academic areas and assist in the development of basis study skills. Faculty and staff work closely with parents to maximise the benefits of the after-school time. With the exception of students who have a pre-approved pass to see a core academic teacher, attendance is required at each session. Students remain in this study program until team teachers determine that they have re-established academic stability.

**Credit recovery program.** Students who experience academic failure quickly fall farther and farther behind, thus perpetuating their academic problems. A credit recovery program, level seven of the Pyramid of Interventions, affords students the opportunity to earn back lost credit due to course failure. This level of the pyramid provides a mechanism for students to maintain the necessary credits to meet graduation requirements. All grade nine and ten courses are semesterised, which allows students to earn one-

half credit per semester for each course successfully completed. Students who fail a core academic semester course have the opportunity to recover the lost credit through the credit recovery program. For instance, a student who fails the first semester of a core academic course (English, mathematics, science or social studies) may participate in the credit recovery program during the second semester - under the following conditions:

- the student maintains a 'C' average in the same course during the present semester
- the student completes all credit recovery requirements outside of the regular school day
- all requirements are completed during the semester the program began.

The credit recovery course requirements are consistent with the core curriculum for each subject area, and the contact time is equivalent to the time requirement in a summer school program. Grant dollars fund credit recovery, and teachers are paid an hourly rate for participating in the program.

**The Success Team.** This was added to the Pyramid of Intervention to meet the needs of students who fail to meet minimum academic standards based on multiple variables. Middle and high school teachers identify students who have not responded to any other academic intervention so far. In essence, the Success Team is an intensive program for students, as they are placed on the team only after all other interventions have been exhausted. The school must meet with parents and obtain their consent in order to place their child on this team. The Success Team provides a learning environment with smaller classes, intense tutorial support and individual/group counselling. Although these students receive the same academic curriculum as

their mainstreamed peers, smaller classes and individualised assistance makes learning more manageable for them. Students enter and exit the program at the beginning of each new marking period. The amount of time a student may be in the program can range from one semester to the full two years. The program provides wrap-around services for each child, engaging all necessary internal and external service providers to meet the child's social, emotional and academic needs. Services also extend to the family to better ensure the student's success.

**The LIFE Program.** The next level of the pyramid is the LIFE Program (Lifelong Initiatives for Education). The LIFE Program services the smallest number of students in an off-site location. The three major components of the LIFE Program are academics, counselling and vocational and/or service learning. Students are enrolled in the program at the discretion of the school's administrator in consultation with teachers, support staff, parents and the student. The goal is for the student to reach a point where s/he sees the LIFE Program as an opportunity rather than a punishment. Students who participate in the program are engaged in academics and counselling for four hours per day, and the rest of the day centres around a vocational component or a service learning project.

A contract is established for each student along with an individualised educational plan that focuses on the specific academic and behavioral needs of the student. Students may return to the high school based on successful completion of the contract.

**The virtual classroom.** The top level of the pyramid is the virtual classroom. Here, students are provided with the opportunity to take up

to 2.5 credits online. These courses are accredited and provide an opportunity for selected students to work on their own schedule to earn elective credits. Students apply to participate in this type of programming, and approval is based on the individual needs of the student. The virtual classroom provides an added degree of flexibility for students to meet graduation requirements.

## Conclusion

Matching student needs to program design is essential when developing a successful Pyramid of Intervention. Assessing the specific requirements of the student population through effective data collection enhances the effectiveness of the pyramid. Early intervention is critical at each stage of the pyramid to maximise services to identified students.

In the development of a Pyramid of Intervention, the value of positive adult-student relationships cannot be over-stated. Caring adults in the life of a child are an essential element in the child's development. For youth who are at a high risk for school failure, these relationships are even more critical. A well-designed plan that makes use of data and involves multiple stakeholders in its development will contribute to a highly successful Pyramid of Intervention. Regular evaluation and review, along with continuous data collection and analysis, contributes to an effective plan that can continue to evolve to meet the changing needs of students.

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